

skilled in the art without departing from the spirit or scope of the invention as defined in the appended claims.

What is claimed is:

sub
A2
1. A communication method in which an input device receives stream data outputted from an output device connected to a predetermined network, comprising the steps of:

preparing as a response from said input device to a command data indicating that an input setting is at least temporarily disabled when said output device or other device transmits said command to said input device such that a data input section of said input device can input outputted data of said output device; and

executing corresponding processing when a source device which transmits said command received said data indicating that said input setting is at least temporarily disabled.

2. A communication method according to claim 1, wherein said data indicating that said input setting is at least temporarily disabled is data indicating that said input device is placed in the standby state although a connection within said input device has been completed so that said input device can input stream data.

3. A communication method according to claim 2, wherein when said command transmission source receives said data indicating that said input setting is at least temporarily disabled, if a connection between said output device and said input device on a network is completed, then said output device starts transmitting said stream

data as corresponding processing.

4. A communication method according to claim 1, wherein said data indicating that said input setting is at least temporarily disabled is data indicating that said input device cannot input stream data due to other causes although said connection within said input device has been completed such that said input device can input stream data and said connection between said output device and said input device on said network has been completed.

5. A communication method according to claim 4, wherein when said command transmission source receives data indicating that said input setting is at least temporarily disabled, it is checked at any time by said command transmission source based on polling whether or not said input device becomes ready to input stream data and if it is determined that said input device becomes ready to input stream data, then said output device starts transmitting stream data as corresponding processing.

6. A communication method according to claim 4, wherein when said command transmission source receives data indicating that said input setting is at least temporarily disabled, said command transmission source transmits a command notifying that said input device becomes ready to input stream data as corresponding processing and when said command transmission source receives a command indicating that the status of said input device is changed, said output device starts transmitting stream data.

7. A communication method according to claim 1, wherein said data indicating that said input setting is at least temporarily disabled is data indicating that a connection between said output device and said input device on the network is failed although a connection within said input device has been completed such that said input device can input stream data.

8. A communication method according to claim 7, wherein when said command transmission source receives said data indicating that said input setting is at least temporarily disabled, it is checked at any time by said command transmission source based on polling whether or not a connection between said output device and said input device has been completed and if it is determined by said command transmission source that said connection between said output device and said input device has been completed, then said output device starts transmitting stream data as corresponding processing.

9. A communication method according to claim 7, wherein when said command transmission source receives said data indicating that said input setting is at least temporarily disabled, said command transmission source transmits a command notifying that a connection between said output device and said input device has been completed and when said command transmission source receives a command indicating that the status is changed, said output device starts transmitting stream data as corresponding processing.

10. A communication method according to claim 1, wherein said

data indicating that said input setting is at least temporarily disabled is data indicating that a time period required when said input device becomes ready to process stream data therein is longer than an ordinary time period by a constant time.

11. A communication method in which an input device receives stream data outputted from an output device connected to a predetermined network, comprising the steps of:

confirming by a response based on a first command whether or not a connection has been completed such that said input device can input stream data therein and confirming whether or not a connection between said output device and said input device on a network has been completed when said output device or other device transmits a first command in setting that a data input section of said input device can input outputted data of said output device;

transmitting a second command to execute predetermined confirmation concerning that said input device becomes ready to input the outputted data of said output device; and

enabling said output device to start transmitting stream data if it is confirmed by a response based on said second command that said input device becomes ready to input the outputted data of said output device.

12. A communication method according to claim 11, further comprising the steps of transmitting said first command, issuing an interim response when said input device cannot issue a response based on said first command within a predetermined time due to some

cause and confirming by a response based on said first command whether or not a connection has been completed such that said input device can input stream data therein.

13. A communication method according to claim 11, further comprising the step of transmitting again said second command if it is determined by a response based on said second command that said input device is disabled to input stream data.

14. A communication method according to claim 11, wherein after it has been confirmed by the response based on said second command that said input device is disabled to input stream data and that said input device is ready to input stream data, it is confirmed whether or not said output device and said input device are connected through a network.

15. A communication method according to claim 11, further comprising the step of transmitting, instead of said second command, a command notifying that the status in which said input device is ready to input stream data is changed and wherein if it is confirmed by a response based on said command that said input device is ready to input stream data, then said output device starts transmitting stream data.

16. A communication method according to claim 11, further comprising the step of transmitting, instead of said second command, a command notifying that the status in which said input device is

ready to input stream data is changed and wherein after it was confirmed that said input device is disabled to input stream data and that said input device is ready to input stream data, it is confirmed whether or not said output device and said input device are connected through the network.

17. A communication method according to claim 11, further comprising the step of transmitting to said output device a command to confirm whether or not said output device is ready to transmit stream data and wherein if it is confirmed by a response based on said command that said output device is ready to transmit stream data, then said output device starts transmitting stream data.

18. A communication method according to claim 11, further comprising the step of transmitting to said output device a command to confirm whether or not said output device is ready to transmit stream data and wherein if it is determined by a response based on said command that said output device is not ready to transmit stream data, then said command is transmitted again to said output device.

19. A communication method according to claim 11, further comprising the step of transmitting a command notifying that the status in which said output device is ready to transmit stream data is changed and wherein if it is determined by a response based on said command that said output device is ready to transmit stream data, then said output device starts transmitting stream data.

20. A communication method according to claim 11, wherein said output device or other device transmits a command to energize said input device before said first command is transmitted.

21. A communication method according to claim 11, wherein when said input device receives said first command, said input device is energized.

22. A communication method according to claim 11, wherein said output device or other devices are continuously executing display processing notifying that transmission of said stream data is placed in the standby mode until it is confirmed by a response based on said second command that said input device becomes ready to input stream data.

23. A communication method according to claim 11, wherein said output device or other devices are continuously executing display processing notifying that transmission of said stream data is placed in the standby mode until it is confirmed by a response based on a command notifying that the status in which said input device is ready to input stream data is changed that the input device becomes ready to input stream data.

24. A communication apparatus connected to a predetermined network, comprising:

input and output means for communicating with other devices within said network; and

communication control means for detecting by data received at

said input and output means a command to enable said input and output means to receive stream data from a predetermined device and enabling said input and output means to transmit data indicating that an input setting of said stream data is at least temporarily disabled to said command transmission source when the input setting of said stream data is at least temporarily disabled.

25. A communication apparatus according to claim 24, wherein said data indicating that the input setting for transmitting stream data from said input and output means under control of said communication control means is at least temporarily disabled is data indicating that said input and output means is placed in the standby mode although an internal connection for supplying stream data received by said input and output means to stream data processing means has already been completed.

26. A communication apparatus according to claim 24, wherein said data indicating that the input setting for transmitting stream data from said input and output means under control of said communication control means is data indicating that said input and output means is disabled to input stream data due to other causes within said communication apparatus although an internal connection for supplying stream data received by said input and output means to stream data processing means has already been completed and a connection between a stream data output section of said predetermined device and said input and output means on a network has already been completed.

27. A communication apparatus according to claim 24, wherein said data indicating that the input setting for transmitting stream data from said input and output means under control of said communication control means is at least temporarily disabled is data indicating that a connection between a stream data output section of said predetermined device and said input and output means on the network is failed although an internal connection for supplying stream data received by said input and output means to stream data processing means has already been completed.

28. A communication apparatus according to claim 24, wherein said data indicating that said input setting for enabling said input and output means to transmit stream data under control of said communication control means is data indicating that a time period required until stream data processing means becomes ready to process stream data received by said input and output means is longer than an ordinary time period by a constant time.

29. A communication apparatus connected to a predetermined network, comprising:

input and output means for communicating with other devices within said network; and

communication control means for enabling said input and output means to output a command for enabling other devices to input stream data and in which if it is determined by a response to said command that said other devices are at least temporarily disabled to receive

said command, the output of stream data from said input and output means is paused until said other device becomes ready to receive said command.

30. A communication apparatus according to claim 29, wherein it is checked by polling at any time whether or not said other devices become ready to input stream data and if it is determined that said other devices become ready to input stream data, then said input and output means starts transmitting stream data.

31. A communication apparatus according to claim 29, wherein a command notifying that said other devices becomes ready to input stream data is transmitted from said input and output means to said other devices under control of said communication control means and if said input and output means receives said command indicating that the status of said other devices is changed, then said input and output means starts transmitting stream data.

32. A communication apparatus connected to a predetermined network, comprising:

input and output means for communicating with other device within said network;

communication control means in which if a first command for enabling said input and output means to receive stream data from a predetermined device is detected by data received at said input and output means, a connection is established in the inside of the communication apparatus such that said input and output means can

input stream data, a connection between the communication apparatus and said predetermined device on the network is executed and if said processing is completed, then data notifying that said processing has been completed is transmitted from said input and output means to said first command transmission source; and

communication control means in which if a second command for executing a predetermined confirmation concerning that the communication apparatus is ready to input stream data is detected, then data notifying that the communication apparatus is ready to input stream data is transmitted from said input and output means to said command transmission source.

33. A communication apparatus according to claim 32, wherein said communication control means receives said first command, issues an interim response if said communication control means cannot issue a response based on said first command within a predetermined time due to some cause and in its subsequent response based on the first command, said communication control means has data transmitted from said input and output means to said first command transmission source to the effect that a connection has been completed in the inside of the communication apparatus in such a manner that said input and output means becomes ready to input stream data.

34. A communication apparatus according to claim 32, wherein if it is determined by a response based on said second command that said input and output means is not ready to input stream data, then said communication control means transmits data notifying that said

input and output means is not ready to input stream data from said input and output means to said second command transmission source.

35. A communication apparatus according to claim 32, wherein said first and second command transmission source issues a command for confirming a connection between it and said predetermined device on the network after it has been confirmed by the first and second command transmission source from a response based on said second command that said predetermined device is not ready to input stream data and that said predetermined device is ready to input stream data and when said communication control means detects said command, said communication control means transmits data notifying the connected state on the network from said input and output means to said command transmission source.

36. A communication apparatus according to claim 32, wherein said communication control means transmits data notifying whether or not said predetermined device is ready to input stream data from said input and output means to said command transmission source when said communication control means receives a command notifying that the status in which said predetermined device is ready to input stream data is changed and said communication control means transmits data notifying that the status in which said predetermined device is ready to input stream data is changed from said input and output means to said command transmission source.

37. A communication apparatus according to claim 32, wherein

said command transmission source issues a command for confirming a connection between it and said predetermined device on the network after it had been confirmed by said command transmission source from a response based on command notifying that the status in which said predetermined device is ready to input stream data is changed that said predetermined device is not ready to input stream data and that said predetermined device is ready to input stream data and said communication control means transmits data notifying a connection state on the network from said input and output means to said command transmission device when said communication control means detects said command.

38. A communication apparatus according to claim 32, wherein when said communication apparatus receives said first command, said communication apparatus is energized.

39. A communication apparatus connected to a predetermined network, comprising:

input and output means for communicating with other device within said network; and

communication control means for controlling said input and output means such that said input and output means outputs a first command for setting other device such that said other devices can input stream data and a second command for confirming whether or not said other devices become ready to input stream data.

40. A communication apparatus according to claim 39, wherein

said input and output means transmits again said second command if said communication control means determines by a response based on said second command that said other devices are not ready to input stream data.

41. A communication apparatus according to claim 39, wherein said input and output means outputs a command for confirming whether or not said input device is connected to the network after said communication control means had determined by a response based on said second command that said other devices are not ready to input stream data and that said other devices are ready to input stream data.

42. A communication apparatus according to claim 39, further comprising communication control means for controlling said input and output means such that said input and output means outputs a command notifying that the status in which said other devices are ready to input stream data is changed instead of said second command.

43. A communication apparatus according to claim 39, wherein said input and output means outputs a command for confirming whether or not said input device is connected to the network after said communication control means had determined by a response based on, instead of said second command, a command notifying the change of the status in which said other devices are ready to input stream data that said other devices are ready to input stream data and that

said other devices are not ready to input stream data.

44. A communication apparatus according to claim 39, further comprising communication control means for controlling said input and output means such that said input and output means outputs a command for confirming whether or not other devices are ready to transmit stream data.

45. A communication apparatus according to claim 39, further comprising communication control means for controlling said input and output means such that said input and output means outputs a command notifying the change of the status in which other devices are ready to transmit stream data.

46. A communication apparatus according to claim 39, wherein said communication control means controls said input and output means such that said input and output means outputs a command for energizing said other device before said input and output means transmits said first command.

47. A communication apparatus according to claim 39, wherein transmission of said stream data is paused until said communication control means determines by a response based on said second command that said other device becomes ready to input stream data.

48. A communication apparatus according to claim 39, wherein transmission of said stream data is paused until said communication

control means determines by a response based on, instead of said second command, a command notifying the change of the status in which said other devices are ready to input stream data that said other device becomes ready to input stream data.

49. A communication apparatus according to claim 39, wherein transmission of stream data is paused until said communication control means determines by a response based on a command for confirming whether or not other devices are ready to transmit stream data that said other devices are ready to transmit stream data.

50. A communication apparatus according to claim 39, wherein transmission of stream data is paused until said communication control means determines by a response based on a command notifying the change of the status in which other devices are ready to transmit stream data that said other device becomes ready to transmit stream data.

51. A communication apparatus according to claim 39, further comprising display means for displaying that transmission of said stream data is paused until said communication control means determines by a response based on said second command that said other device becomes ready to input stream data.

52. A communication apparatus according to claim 39, further comprising display means for displaying that transmission of said stream data is paused until said communication control means confirms by a response based on, instead of said second command, a

command notifying the change of the status in which said other devices are ready to input stream data that said other device becomes ready to input stream data.

53. A communication apparatus according to claim 39, wherein transmission of said stream data is started if said communication control means determines by a response based on said second command that said other device becomes ready to input stream data.

54. A communication apparatus according to claim 39, wherein transmission of said stream data is started if said communication control means determines by a response based on, instead of said second command, a command notifying the change of the status in which said other devices are ready to input stream data that said other device becomes ready to input stream data.

55. A communication apparatus according to claim 39, wherein transmission of stream data is started if said communication control means determines by a response based on a command for confirming whether or not other devices are ready to transmit stream data that said other device becomes ready to transmit stream data.

56. A communication apparatus according to claim 39, wherein transmission of stream data is started if said communication control means determines by a response based on command notifying the change of the status in which other devices are ready to transmit stream data that said other device becomes ready to transmit stream data.

57. A communication apparatus connected to a predetermined network, comprising:

input and output means for communicating with other device within said network; and

communication control means for controlling said input and output means such that said input and output means transmits data notifying that other devices are ready to transmit stream data if said communication control means receives from data received by said input and output means a command for confirming whether or not said other devices are ready to transmit stream data.

58. A communication apparatus connected to a predetermined network comprising:

input and output means for communicating with other device within said network; and

communication control means for controlling said input and output means such that said input and output means transmits data indicating the status in which said other devices are ready to transmit steam data to said command transmission source if said communication control means receives from data received by said input and output means command notifying the change of the status in which said other devices are ready to transmit stream data and that said input and output means transmits data of the changed status in which said other devices are ready to transmit stream data to said command transmission source.